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1. The almost overlooked Naval Air Force of the Soviets should not go unnoticed, because it plays a role in the Far East. Like the Fleet Air Arm of the Soviets in the Ostsee, in the Black Sea, and in the Arctic Ocean the Naval Air Force is subordinate to the local Naval Command. The Naval Air Force is composed not only of fleet units, but also of land based units. It is equipped mainly with standard model aircraft, such are used by the Army Air Force. Its top strength in the Far East is about 12 or 15 torpedo bomber squadrons, which are stationed only in Petropavlovsk, Nikolskoye, and Chukotsk.

2. The Turbo-bomber series Tu-12 was designed as far back as 1947 and 1948. The same type of design was also brought off the drafting board some time later as the famous MIG-15. The last model of the Tu-12 is a very fast and modern aircraft. The first two airplanes of the Tu-12 series were made public on Air Force Day of 1948. Both of these machines were the Tu-12 B, which was a distinguished descendant of all its predecessors. While the first Tu-12 had only a few experimental models made, the B series went into mass production. Shortly after the B series went into production, a third series was undergoing flight and combat tests. So it came about that most of the still unfinished B machines were completed in modified form as Tu-12 Cs. This last model composes today the armament of the front echelon in the Far East.

3. The places where the Tu-12 is in production today are not known for sure. However, they must be looked for in the Far East. Therefore, the aircraft factories in Vladivostok, Voroshilov, Chumkka, and Komsomolsk come into the question. All of these places are located in the Far East Coastal provinces of Primorsky Krai and Khabarovsky Krai. Although both provinces with something a little over three million inhabitants represent only a small part of the population of the Soviet Union, their aircraft industry has grown greatly. While the first Tu-12's were produced in the factories in the vicinity of Lake Baikal (for example, in Ulan Ude), they are today produced or at least assembled not only in the above-named East Coast production centers but also evidently in the newest factories on the Kamchatka Peninsula in Petropavlovsk and Dolnevo.

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4. The chief model used by the torpedo bomber squadron is the Tu-12. Designed as a light bomber, it is especially adaptable as a torpedo bomber. The turbo-jet plane is well suited for land based operations. For carrier based operations nothing can be said because the Soviet Navy has no aircraft carriers. The general construction of this model shows an completely modern tendency of design. The wings of the Tu-12 are mounted high on the fuselage so that this model of airplane could be classed as a shoulder wing monoplane. (Schulterdecker). The depth of the wing at the base is great. The wing formation is futuristic in that both wings are trapezoidal. The wing tips are squared and slightly rounded on the ends. The leading edge of the wing runs between the two turbines which are built into the carrying surface and the fuselage on a line with the outer wing. The trailing edge of the wing appears to be straight between the turbines instead of being slanted. In contrast thereto is the normal slanting of the leading edge of the wing which is a point of differentiation between the Tu-12 and the Il-28, which, as is known, has a straight-running leading edge.

5. The power plant in the wings is very similar to the well-known Il-28 model. The distance of both turbines from the fuselage is normal for Soviet design, and shows agreement with the Ilyushin model. The engine housing extends over the leading and trailing edges of the wings. At any rate, this applies to the A and B models. The C model has allegedly stronger turbines, which are longer and squarer. The air intakes of both types of turbine have no underpinnings and are round.

6. The fuselage of the Tu-12 is unusually long and almost circular, and produces the impression of aerodynamically clean lines. Above all, it is unusually narrow. The two-placed cabin in models A and B sits in the middle of the fuselage, while in the C model it is placed more to the starboard side, similar to the UK experimental model, the de Haviland DH-110. The pointed nose of the Tu-12 was completely transparent on the first machine, the same as on the US Turbo-bomber Convair XB-46. Newer machines have a glazed surface on the nose, which extends to the rear slightly along the under surface of the fuselage. Otherwise, the fuselage of the A and B models is broken only by a gun turret on the top side of the fuselage and a gun turret on the under side of the fuselage about two-thirds of the way from the nose. Both gun turrets are built very low, which aerodynamically is very good. Their design suggests that they are either retractable or operated by remote control. The last theory is supported by the fact that only two or at the most three men can be accommodated in the cabin. The C model differs from the first airplane in that it has no gun turrets but only a tail gun position under the vertical stabilizer.

7. The horizontal stabilizer in the tail assembly is built out of the pointed fuselage. The leading edge is strongly rounded. The upper part of the horizontal stabilizer is squared on the end. The horizontal stabilizer is a good meter in depth. The trailing edge slopes downward. This peculiarity is easily recognized in the three-sided view of the B model of the Tu-12. The horizontal stabilizer of the C model differs from this insofar as the fuselage ends in a tail gun position. The vertical stabilizer is pointed and sits in the middle of the horizontal stabilizer. Its base takes up almost the entire breadth of the horizontal stabilizer. Only the Tu-12 has a straight vertical stabilizer.

8. Both fuselage gun turrets on the A and B models have twin mount 12.7 mm machine guns. A tail gun position with the same armament is in the C model, which has no gun turrets. All three models have powerful armament in the nose. On each side of the nose is a 20 mm cannon, which is sunk completely into the fuselage, so that one can see only the gun ports for these weapons. Part of the equipment of the Tu-12 C is a radar apparatus, which is carried in a tub on the under side of the fuselage. In the older models this tub is not visible. The bombs or torpedoes are carried in the fuselage. The small but long bomb bay is built to take torpedoes, but is sometimes used to carry sea mines. The under side of the fuselage is painted blue-green.

9. The B model has two radial turbines, model RD-45 (the same power plant is used in the MIG-15). This power plant is a slightly changed and improved version of the Rolls Royce NENE II, which was built by the Soviet manufacturer M D Chelomey. The starting performance (sic) of the first version of the RD-45 is allegedly 2,300 kgp, but it is known that this performance can be raised to 2,700 kgp without water injections and 3,050 kgp with them. The specific consumption is figured to be 1.14 kg/kgp/h and for the newer models to be 1.09 kg/kgp/h. The improved Soviet NENE II has a dry weight of 900 kg, as opposed to 780 kg in the original model. The Tu-12 carries 10,200 liters of fuel. The power plant RD 45 is 2.5 m long, and has a maximum width of 1.3 m. The C model of the Tu-12 has instead of the RD-45 turbines two A D Shvetsov turbines. This turbine is a further development of the BMW-018. It has a 12 step axial compressor. The starting performance should be up to four thousand kgp. By purely outward characteristics this power plant is recognizable because it is longer. However, the width is somewhat similar to that of the RD-45. The turbine itself is five m long, and has a maximum width of 1.25 m.

10. Measurements of the Tu-12 B are: length 23.5 m, height (approx) six m, wing-span 22.85 m, wing surface area 73.6 m, wing depth at the base 4.40 m, at the tip 1.80 m, span of the vertical stabilizer 7.20 m, slope about 35 degrees.

Weight of equipment		10,480 kg
Consists of:	crew	320 kg
	armament	600 kg
	Additional Equipment	500 kg
	Fuel	8,500 kg
	Torpedoes or Bombs	3,000 kg
	Flying Weight	23,400 kg
Weight per square meter of surface		318 kg/m^2
Performance load		5.09 - 3.83 kg/kgp
Surface performance		62.5 - 82.8 kgp/m^2

11. The top speed of the Tu-12B is 870 km/h at zero meters altitude, 843 km/h at 5,500 m, 770 km/h at 12 thousand m, cruising speed (most economical) 660 km/h at nine thousand m, rate of climb 13.72 m per second, climbing time to nine thousand m 16 minutes, service ceiling 13 thousand m, operational radius with full bomb load 1,200 km, which means a range of three thousand km. The performance of the Tu-12 C with the stronger M-018 turbines is better, so that the top speed should reach 965 km/h.

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